

#### March 1, 1999

Mr. Frank Battaglia, Project Manager USEPA Region I Waste Management Building 90 Canal Street Boston, MA 02114

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OTHER

RE:

Monthly Progress Report

Ciba Specialty Chemicals, 180 Mill Street, Cranston, RI 02905

**EPA ID RID001194323** 

Dear Mr. Battaglia:

As required by the modified Consent Decree (CD) of September 28, 1992, I am submitting the monthly stabilization progress report for January 1999.

#### 1.0 SUMMARY

## Stabilization Plan (IRM)

• Contaminated groundwater in the Production Area (AOC 13) -- The groundwater extraction wells 110 and 120 and the pretreatment system are operating at near capacity due to the successful rehabilitation of both recovery wells.

Since the initiation on September 29, 1995, the groundwater stabilization pretreatment plant has processed approximately 100 million gallons of contaminated groundwater meeting the permit wastewater discharge limits for the City of Cranston, Rhode Island.

The City of Cranston has granted Ciba a permit modification to reduce the frequency of discharge monitoring from monthly to quarterly beginning the second quarter of 1999.

• Soil in the Production Area (SWMU 11) -- The SVE was shut down on July 16, 1997, due to an odor problem from the unit that could not be immediately corrected. Ciba is now reviewing a possible corrective action that will include other technologies, as well as, the SVE, in order to remove the contamination within the SWMU 11 area.

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#### 2.0 DISCUSSION

# **Groundwater Monitoring for October 1998**

Monitoring results for October 1998 (see attachment) demonstrate that little has changed in some specific groundwater contaminant concentrations since September 1995 when the two extraction wells began operation. In particular, the data for 6 monitoring wells along the bulkhead show 3 of the wells (MW-001S, MW-002S, & P-035S) have continue to exceed the Media Protection Standard (MPS) for chlorobenzene. The 200 feet of southern bulkhead monitored by these three wells also encompasses the 10-15 % break in the areal extent of the capture zone.

The latest modeling results utilizing the increase well capacities from well rehabilitation demonstrate a maximum 87 percent capture of groundwater discharge to the Pawtuxet River. To meet or exceed the proposed performance of 96 percent capture as proposed in the PRCMS Ciba will install a third extraction well probably at or close to the location of the originally proposed PW-130. The exact location and screening will be established after reviewing the stratigraphy, past pump test results, and the results of the two presently operating purge wells.

A letter proposal will be prepared on the third purge well installation for the EPA to review, comment, and approval.

### Well rehabilitation and proposed O&M of the Extraction Wells

D.L. Maher performed well rehabilitation for the two extraction wells in December 1996. Well capacity was improved by 10-14 percent at PW-110 and by 100 percent at the lower pumping well PW-120. The well development report is included along with this report and D.L. Maher recommends the following corrective measures to ensure maximum efficiency of the wells:

- Check and clean the water lines from well head to treatment facility. This operation
  will be performed whenever pressure build-up at well head pumps show lines are
  plugging (iron build-up) and clean out is required to restore normal operating
  pressure.
- Monitor the specific capacity of each well by logging the pumping rate and drawdown
  of the well. When the capacity decreases by 30% redevelopment of the well is
  necessary.

Ciba will monitor line pressures and well capacities as described above to insure maximum purge well efficiency.

# 3.0 SCHEDULE OF ACTIVITIES

- Address remediation in the SWMU 11 area (Mike Goodman)
- Install a third purge well PW-130..

If you have questions or need additional information, please contact me at 732 914-2537 or fax 732 914-2909.

Sincerely,

Barry Cohen

Projector Coordinator

attachment:1

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